

CLAIMS

1. A method for manufacturing a resin composition,
wherein the resin composition is manufactured from a raw material
5 composition containing a polyester resin, a polyolefin resin and a
compatibilizer, and
which comprises a kneading step for kneading the raw material
composition in the presence of moisture.
- 10 2. The manufacturing method according to Claim 1, wherein the
polyester resin contains polyethylene terephthalate (PET).
- 15 3. The manufacturing method according to Claim 1, wherein the
polyester resin contains a polyester resin derived from a recycled (processed)
material.
- 20 4. The manufacturing method according to Claim 1, wherein a weight
of the polyester resin in the raw material composition ranges from 10 wt%
to 99.8 wt% with respect to a total weight of the polyester resin, the
polyolefin resin and the compatibilizer.
- 25 5. The manufacturing method according to Claim 1, wherein the
polyolefin resin contains at least one selected from the group consisting of
polyethylene, polypropylene and a copolymer of propylene and ethylene.
- 30 6. The manufacturing method according to Claim 1, wherein a weight
of the polyolefin (PO) resin in the raw material composition ranges from 0.1
wt% to 90 wt% with respect to a total weight of the polyester resin, the
polyolefin resin and the compatibilizer.

7. The manufacturing method according to Claim 1, wherein the compatibilizer contains at least one selected from the group consisting of an ethylene copolymer, an ionomer resin and a denatured hydrogenated polymer component.

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8. The manufacturing method according to Claim 1, wherein a weight of the compatibilizer in the raw material composition ranges from 0.1 wt% to 20 wt% with respect to a total weight of the polyester resin, the polyolefin resin and the compatibilizer.

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9. The manufacturing method according to Claim 1, wherein the raw material composition further contains an additive.

10. The manufacturing method according to Claim 9, wherein the additive contains at least one of a plant tissue-derived component and an inorganic filler.

15 11. The manufacturing method according to Claim 9, wherein a weight of the additive in the raw material composition ranges from 1 part by weight to 200 parts by weight with respect to 100 parts by weight of a total weight of the polyester resin, the polyolefin resin and the compatibilizer.

20 25 12. The manufacturing method according to Claim 1, wherein the raw material composition contains moisture in advance of proceeding toward the kneading step.

30 13. The manufacturing method according to Claim 12, wherein a content of the moisture in the raw material composition immediately before the proceeding toward the kneading step ranges from 0.01 parts by weight to 20 parts by weight with respect to 100 parts by weight of a total weight of

the components of the raw material composition except the moisture.

14. The manufacturing method according to Claim 1, wherein, in the kneading step, the kneading is conducted while moisture is added into the
5 raw material composition.

15. The manufacturing method according to Claim 1, wherein, in the kneading step, the kneading is conducted while at least one of the components of the raw material composition except moisture is added into
10 the raw material composition.

16. The manufacturing method according to Claim 15,
wherein, in the kneading step, the kneading is conducted while moisture is added into the raw material composition, and
15 an adding amount of the moisture per 1 hour ranges from 0.01 parts by weight to 20 parts by weight with respect to 100 parts by weight of a total adding amount of the components of the raw material composition except the moisture per 1 hour.

20 17. The manufacturing method according to Claim 1, wherein the moisture contains at least one of water at a temperature of 40°C or more and water vapor.

18. The manufacturing method according to Claim 9, wherein the
25 additive contains a foaming agent.

19. The manufacturing method according to Claim 18, wherein the raw material composition is foamed by being kneaded in the presence of moisture.

20. The manufacturing method according to Claim 18, wherein the raw material composition is foamed after the kneading.

21. The manufacturing method according to Claim 1, further comprising 5 a step of foaming the raw material composition by adding a foaming agent, after kneading the raw material composition in the presence of the moisture.

22. A resin composition, which is manufactured by the manufacturing 10 method according to Claim 1.

23. The resin composition according to Claim 22, which is a foam.

24. The resin composition according to Claim 23, which is a foam sheet, 15 a foam board, a foam mat, a foam thick plate, a foam tray or a foam mold.

25. A resin product, which is obtained by using the resin composition according to Claim 22.